

=> d his 1

(FILE 'HCAPLUS' ENTERED AT 11:58:49 ON 26 MAY 2004)

L2 1 S L1 AND RIBOZYME#

=> fil reg

FILE 'REGISTRY' ENTERED AT 12:00:50 ON 26 MAY 2004

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 25 MAY 2004 HIGHEST RN 685826-98-6

DICTIONARY FILE UPDATES: 25 MAY 2004 HIGHEST RN 685826-98-6

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> d sqide l1 1-9

L1 ANSWER 1 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN

RN 288706-09-2 REGISTRY

CN GenBank AX012290 (9CI) (CA INDEX NAME)

FS NUCLEIC ACID SEQUENCE

SQL 57

NA 7 a 20 c 19 g 11 t

SEQ 1 ggggtccacct cctcgcggtc cgatctgggc atgcggcttc gcatggctaa

=====

51 gggaccc

=====

HITS AT: 1-57

MF Unspecified

CI MAN

SR GenBank

LC STN Files: GENBANK

L1 ANSWER 2 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN

RN 288706-08-1 REGISTRY

CN GenBank AX012289 (9CI) (CA INDEX NAME)

FS NUCLEIC ACID SEQUENCE

SQL 57

NA 7 a 20 c 20 g 10 t

SEQ 1 ggggtccacct cctcgcggtc cgagctgggc atgcggcttc gcatggctaa

=====

51 gggaccc

=====

HITS AT: 1-57  
 MF Unspecified  
 CI MAN  
 SR GenBank  
 LC STN Files: GENBANK

L1 ANSWER 3 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN  
 RN 288706-07-0 REGISTRY  
 CN GenBank AX012288 (9CI) (CA INDEX NAME)  
 FS NUCLEIC ACID SEQUENCE  
 SQL 57  
 NA 8 a 20 c 19 g 10 t

SEQ 1 ggggtccacct cctcgcggtc cgaactgggc atgcggcttc gcatggctaa  
 =====  
 51 gggaccc  
 =====

HITS AT: 1-57  
 MF Unspecified  
 CI MAN  
 SR GenBank  
 LC STN Files: GENBANK

L1 ANSWER 4 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN  
 RN 288706-06-9 REGISTRY  
 CN GenBank AX012287 (9CI) (CA INDEX NAME)  
 FS NUCLEIC ACID SEQUENCE  
 SQL 57  
 NA 6 a 21 c 19 g 11 t

SEQ 1 ggggtccacct cctcgcggtc cgtcctgggc atgcggcttc gcatggctaa  
 =====  
 51 gggaccc  
 =====

HITS AT: 1-57  
 MF Unspecified  
 CI MAN  
 SR GenBank  
 LC STN Files: GENBANK

L1 ANSWER 5 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN  
 RN 288706-05-8 REGISTRY  
 CN GenBank AX012286 (9CI) (CA INDEX NAME)  
 FS NUCLEIC ACID SEQUENCE  
 SQL 57  
 NA 6 a 21 c 20 g 10 t

SEQ 1 ggggtccacct cctcgcggtc cggcctgggc atgcggcttc gcatggctaa  
 =====  
 51 gggaccc  
 =====

HITS AT: 1-57  
 MF Unspecified  
 CI MAN  
 SR GenBank  
 LC STN Files: GENBANK

L1 ANSWER 6 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN  
 RN 288706-02-5 REGISTRY

CN GenBank AX012283 (9CI) (CA INDEX NAME)  
 FS NUCLEIC ACID SEQUENCE  
 SQL 57  
 NA 7 a 21 c 19 g 10 t

SEQ 1 ggggtccacct cctcgcgggc ccagctgggc atgcggcttc gcatggctaa  
 =====  
 51 gggaccc  
 =====

HITS AT: 1-57  
 MF Unspecified  
 CI MAN  
 SR GenBank  
 LC STN Files: GENBANK

L1 ANSWER 7 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN  
 RN 288706-01-4 REGISTRY  
 CN GenBank AX012282 (9CI) (CA INDEX NAME)  
 FS NUCLEIC ACID SEQUENCE  
 SQL 57  
 NA 7 a 21 c 19 g 10 t

SEQ 1 ggggtccacct cctcgcgggc cgacctgggc atgcggcttc gcatggctaa  
 =====  
 51 gggaccc  
 =====

HITS AT: 1-57  
 MF Unspecified  
 CI MAN  
 SR GenBank  
 LC STN Files: GENBANK

L1 ANSWER 8 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN  
 RN 210411-85-1 REGISTRY  
 CN Ribozyme (synthetic hepatitis delta virus trans-cleaving derivative  
 8RzPl.2) (9CI) (CA INDEX NAME)  
 FS NUCLEIC ACID SEQUENCE  
 SQL 57  
 NA 7 a 21 c 19 g 10 u  
 NTE singlestranded

SEQ 1 ggguccaccu ccucgcgguc ccagcugggc augcggcuuc gcauggcuua  
 =====  
 51 gggaccc  
 =====

HITS AT: 1-57  
 MF Unspecified  
 CI MAN  
 SR CA  
 LC STN Files: CA, CAPLUS  
 DT.CA Caplus document type: Journal  
 RL.NP Roles from non-patents: BIOL (Biological study); PRP (Properties)  
 1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L1 ANSWER 9 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN  
 RN 210411-84-0 REGISTRY  
 CN Ribozyme (synthetic hepatitis delta virus trans-cleaving derivative  
 8RzPl.1) (9CI) (CA INDEX NAME)

FS NUCLEIC ACID SEQUENCE  
 SQL 57  
 NA 7 a 21 c 19 g 10 u  
 NTE singlestranded

SEQ 1 ggguccaccu ccucgcgguc cgaccugggc augcggcuuc gcauggcuua  
 =====  
 51 gggaccc  
 =====

HITS AT: 1-57

MF Unspecified

CI MAN

SR CA

LC STN Files: CA, CAPLUS

DT.CA Caplus document type: Journal

RL.NP Roles from non-patents: BIOL (Biological study); PRP (Properties)

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> fil hcaplus

FILE 'HCAPLUS' ENTERED AT 12:01:28 ON 26 MAY 2004

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FILE LAST UPDATED: 25 May 2004 (20040525/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d ibib abs 12 1

L2 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1998:345095 HCAPLUS

DOCUMENT NUMBER: 129:132959

TITLE: Substrate specificity of  $\delta$  ribozyme cleavage

AUTHOR(S): Ananvoranich, Sirinart; Perreault, Jean-Pierre

CORPORATE SOURCE: Department de Biochimie, Universite de Sherbrooke, Quebec, J1H 5N4, Can.

SOURCE: Journal of Biological Chemistry (1998), 273(21), 13182-13188

CODEN: JBCHA3; ISSN: 0021-9258

PUBLISHER: American Society for Biochemistry and Molecular Biology

DOCUMENT TYPE: Journal  
LANGUAGE: English

AB The specificity of  $\delta$  **ribozyme** cleavage was investigated using a trans-acting antigenomic  $\delta$  **ribozyme**. Under single turnover conditions, the wild type **ribozyme** cleaved the 11-mer ribonucleotide substrate with a rate constant of 0.34 min<sup>-1</sup>, an apparent  $K_m$  of 17.9 nM and an apparent second-order rate constant of  $1.89 \times 10^7$  min<sup>-1</sup> M<sup>-1</sup>. The substrate specificity of the  $\delta$  **ribozyme** was thoroughly investigated using a collection of substrates that varied in either the length or the nucleotide sequence of their P1 stems. The authors observed that not only is the base pairing of the substrate and the **ribozyme** important to cleavage activity, but also both the identity and the combination of the nucleotide sequence in the substrates are essential for cleavage activity. The authors show that the nucleotides in the middle of the P1 stem are essential for substrate binding and subsequent steps in the cleavage pathway. The introduction of any mismatches at these positions resulted in a complete lack of cleavage by the wild type **ribozyme**. Our findings suggest that factors more complex than simple base pairing interactions, such as tertiary structure interactions, could play an important role in the substrate specificity of  $\delta$  **ribozyme** cleavage.

REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT